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A TICK-FREE SOUTH

THE MOSS ON THE TREES SHOWS IT IS LOUISIANA AND THE CATTLE SHOW THAT THE TICK HAS BEEN DIPPED OUT.

A TICK-FREE SOUTH

U. S. DEPARTMENT OF AGRICULTURE
BUREAU OF ANIMAL INDUSTRY
Washington, D. C.

A TICK-FREE DAIRY HERD IN SOUTH CAROLINA.

A TICK-FREE SOUTH.

THE cattle tick is being stamped out in the South. On thousands of farms, where it once feasted on unthrifty scrubs, there are now pure-bred bulls and grade herds of beef and dairy cattle, grazing in security and turning their owners' feed into flesh and milk untaxed by the toll of blood the tick levies on its victims. The change that the elimination of the pest can bring is shown in these pictures. Their like can be seen in any of the tick-freed areas. These areas are growing in number and size each year. Already many States are absolutely free, and the total eradication of the tick is now only a matter of determination on the part of those who still suffer from it. A trifling investment of money and trouble will release any county from the handicap under which southern farmers have always labored.

Good live stock is the basis of good farming. Without cattle pastures lie idle, roughage goes to waste, there is no manure with which to enrich the soil, and the farmer must depend for his living almost entirely upon one or two cash crops, which may or may not yield him a profit. With poor cattle the upshot is much the same, for scrubs do not turn feed into beef and milk to the extent that grade stock does. The average run of cattle in the South to-day unquestionably is far inferior to the stock in other sections where natural conditions are less favorable, and, in consequence, the returns to the southern farmer are unduly small.

The tick is the explanation. For generations this parasite has been sucking the blood of the cattle of the South, killing some with Texas fever and weakening the vitality of the survivors. But above all it has prevented the introduction of new and better blood with which to build up the run-down herds. There is a saying among cattle men that the bull is half the herd, but few owners care to import a valuable bull into a ticky country only to see it die of tick fever. The returns from grade stock in heavier, fatter animals and in greater milk production have been demonstrated many times. Elsewhere the farmer is taking the lesson to heart, but the man in a ticky county is helpless to act upon it no matter how convinced of its importance.

When the tick goes out it leaves the door open for the pure-bred bull to come in. Like most good things, such an animal costs money, but for those unable to make such a heavy investment there are the cooperative bull clubs. Through the medium of these organizations farmers can secure for themselves at a very moderate

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cost all the benefits of a pure-bred sire which replaces in a community a number of individually owned scrub bulls. These scrubs may and in all probability do represent in the aggregate a much larger investment than the one pure-bred, but they do nothing like as much to bring money into the community. In one club the

This sire started with good blood but ticks are getting the blood that ought to go into breeding strength.

membership fee was $7.50 a year. In return the farmer obtained in the course of a period of 10 years the services of five $240 bulls.

The ultimate effect of such organization upon the character of the herds is, of course, obvious. And the South is badly in need of improvement in this respect. On January 1, 1915, the average price of 2-year-old beef cattle in 10 tick-infested States was $25.90. For the remainder of the country it was $48.47. Eighteen tick-free States had an average of over $50, and only two were under $40. Part of this difference is due to the fact that ticky cattle are not only scrubs but unhealthy

This shows what ticks do to a pure-bred cow—suck out the valuable blood that she should be giving to her calves. The better the blood, the more costly the tick's meal.

scrubs as well. The blood that should go to the making of flesh is wasted in feeding the tick. The tick grows fat, the steer stays thin. In one case in which a tick-infested steer was dipped as an experiment in the arsenical bath for a period of two months, the animal's weight on the same feed rose from 730 to 1,015 pounds. With

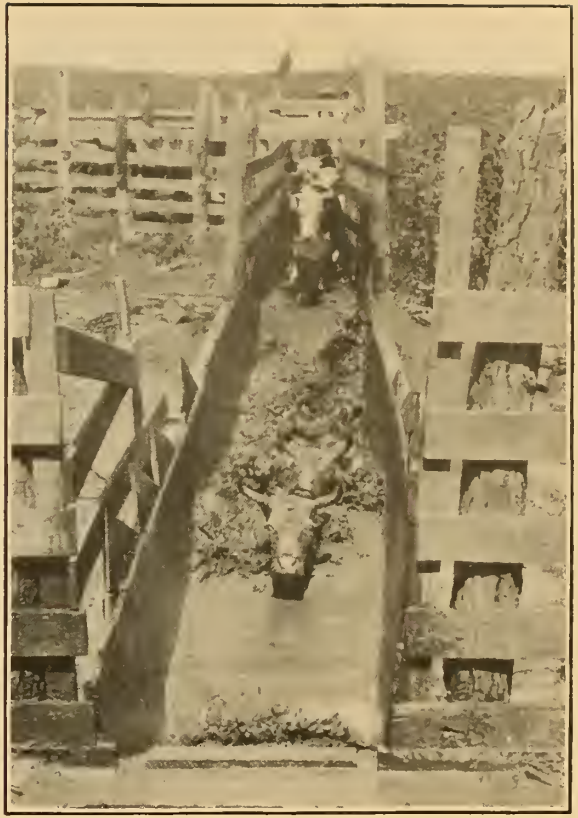
A TICKY HERD. MACHINES FOR TURNING PASTURAGE AND FEED INTO BLOOD FOR TICKS INSTEAD OF INTO MEAT, MILK, AND PROFITS FOR THEIR OWNER.

dairy cattle there is a corresponding loss in the milk flow from ticky stock. Depending on the heaviness of the infestation this loss in milk may range from 18 to 42 per cent of the normal production, and a reduction of even 18 per cent is quite sufficient to turn a dairyman's profit into a loss.

Under these conditions it is not surprising that in many parts of the South to-day both dairying and beef raising are neglected and unpopular industries. The remedy is, however, simple. The way to get rid of the tick is known as positively as the harm that it does. Repeated dippings in an arsenical bath of all the herds in a county will kill off the pest in the course of one season, and thereafter all that is needed is a little care to prevent its regaining a foothold. The danger of this is, of course, diminishing fast as the tick is removed from one stronghold after another. Already 312,012 square miles have been cleaned and released from quarantine out of a total infested area 10 years ago of 728,565 square miles. There is no southern State in which some territory has not been reclaimed, and in all this work there are only two instances of a county once freed allowing itself to become reinfested.

The cost of dipping in comparison with the benefits is trivial. From $40 to $60 should cover the cost of the materials for a dipping vat for the neighborhood, and the labor is usually donated by those who expect to use the bath. The cost of the arsenic and other materials used in preparing the bath is well under 5 cents a season for each head of cattle dipped. Vats and baths must be supplied by the people of the county, but the U. S. Department of Agriculture will furnish trained men to supervise the construction of the vats, the preparation of the baths, and the actual dipping of the cattle. Under such supervision there is no danger of injury to the cattle. A few simple precautions do away with all risk of this. The animals, for example, should not be thirsty when dipped, as they might be tempted to drink in the bath, and this is intended for external use only. For 10 years now, however, cattle have been dipped in thousands in these vats and there is no evidence that any appreciable number have ever been injured in any way.

There is far more danger that indifference, negligence, or sheer laziness on the part of a few cattle owners will hold the work back or render it of no avail. To be effective the dipping must be done at intervals of approximately two weeks and all cattle must be dipped. To overlook a few steers is to leave to the tick a feeding ground and a breeding refuge from which they will emerge to raid anew the dipped cattle on other farms. In every county there are usually a few recalcitrants who either can not or will not see any good in tick eradication. Unless their neighbors are willing to suffer



A swim through the arsenical dipping vat and the cattle are freed from blood-sucking ticks. A few more treatments and the county is tick free and ready to welcome the prosperity that comes from good cattle and dairy herds.

indefinitely for their obstinacy these men must be compelled to dip with the rest. For this reason the customary preliminary to a campaign of eradication is a county election in which the people vote for or against the undertaking. If eradication is carried, the local authorities are empowered to enforce the necessary regulations.

Sanitary Board will designate the parishes in which work is to be done, inaugurating in this way a systematic campaign that will result in the freeing of the entire State.

A strong argument for this movement to make eradication a State instead of a county matter is to be found in the injurious effect upon a free county of a tick-

This pure-bred bull was dipped at intervals of 14 days by his Georgia owner. The owner knows his blood is worth more in calves than in ticks.

This cow couldn't live with ticks. The ticks were dipped out and she was brought in—made 160 pounds of butter in 30 days and her offspring sold for $1,000.

Two States, Mississippi and Louisiana, however, have gone further than this. In the belief that the existence of the tick in any county is a menace to the prosperity of the entire State, the people of Mississippi have decreed that all tick-infested counties shall undertake eradication. In Louisiana, after April 1, 1918, the State Live Stock

infested neighbor. The Federal Government, as is well known, has quarantined all ticky sections. From these areas no cattle can be shipped out unless they have been dipped under Federal inspection or are intended for immediate slaughter. Obviously these restrictions, essential for the protection of the rest of the country, hamper the

marketing of local cattle and tend to depress the price of steers in the quarantined areas. Unfortunately, this effect extends, to some extent at least, to those counties which, though free themselves and released from quarantine, may chance to be surrounded by infested territory. It is because so much of Mississippi already has been cleared of the pest that the people of the State are in a position to insist that a few backward counties shall not indefinitely disturb the trade of the whole State.

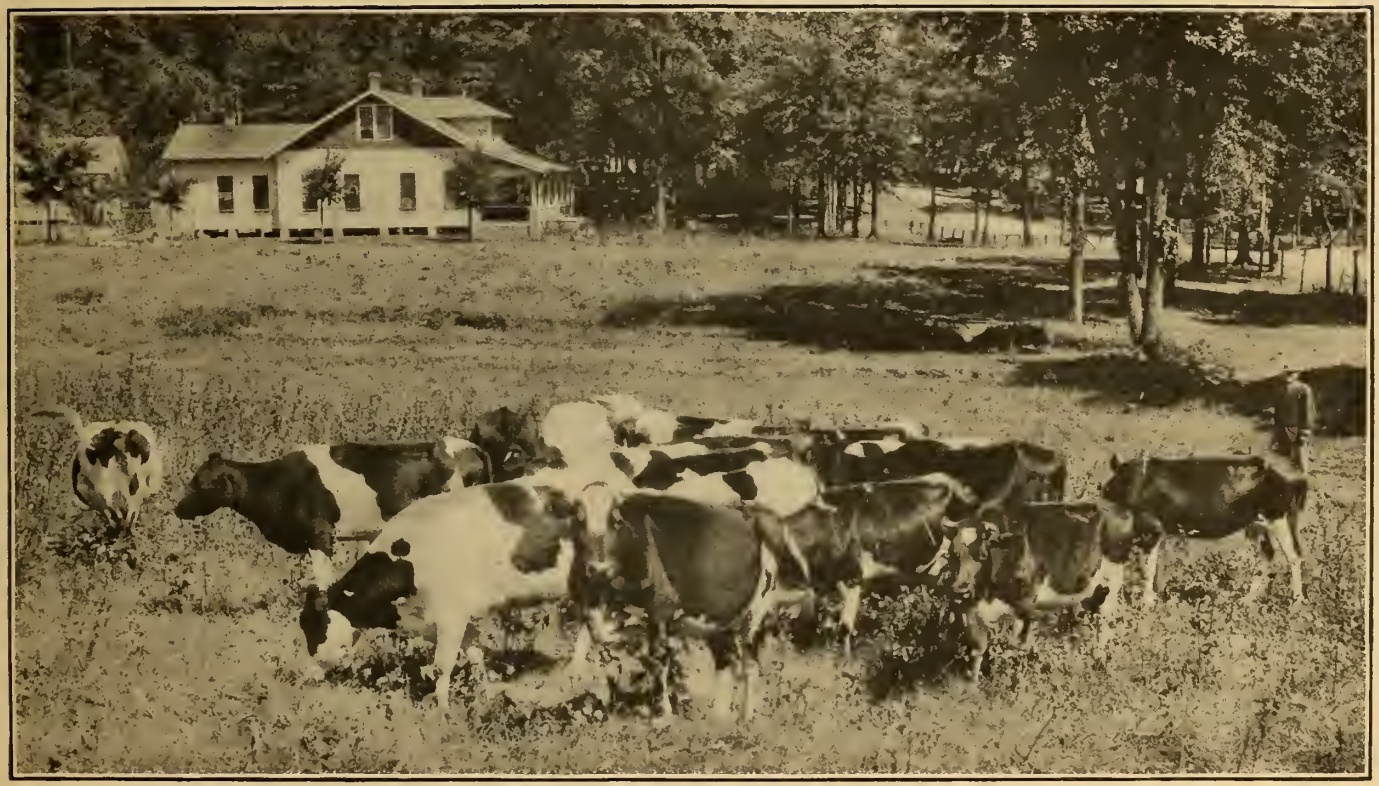
For the tick and prosperity do not get on well together; they are not good neighbors. The tick means poor, scrubby, unthrifty cattle; prosperity demands good herds, well cared for. The South, with its long growing season, its abundance of cheap feeds, and its mild climate, can raise cattle economically and market them profitably. Where this is being done to-day the whole aspect of farm life has been changed. It can be done everywhere, if only the tick is eradicated. And the tick can be eradicated.

THE OWNER OF THIS TEXAS HERD FOUND IT PAID TO GET RID OF TICKS.

THIS MISSISSIPPI SCENE SHOWS THE TYPE OF FARM THAT FOLLOWS THE DIPPING VAT.

A GEORGIA DAIRY FARM TYPICAL OF WHAT MIGHT BE COMMON IN THE SOUTH BUT FOR THE TICKS.

THE OWNER OF THIS ARKANSAS FARM FIRST GOT RID OF THE TICK AND THEN GOT RID OF SCRUB CATTLE.



DAIRY PROSPERITY ON A TICK-FREE ALABAMA FARM.

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For further information in regard to tick eradication you are requested to write to the Bureau of Animal Industry, U. S. Department of Agriculture, Washington, D. C., or to the local office of the bureau in your State.

Address "Bureau of Animal Industry" at any of the following places:

Jefferson County Savings Bank Building, Birmingham, Ala.
Gazette Building, Little Rock, Ark.
Herd Building, Jacksonville, Fla.
Federal Building, Atlanta, Ga.
Roumain Building, Baton Rouge, La.
Millsaps Building, Jackson, Miss.
Federal Building, Washington, N. C.
Western Union Building, McAlester, Okla.
Union National Bank Building, Columbia, S. C.
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